The attached Appendix includes a Substitute Specification (37 C.F.R. §1.125(b)(2)) and each rewritten claim (37 C.F.R. §1.121(c)(1)(ii)).

Prompt and favorable examination on the merits is respectfully requested.

Respectfully submitted,

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Attachments:
- Substitute Abstract
- Appendix
- Substitute Specification
- Marked-up copy of original application



Date: October 4, 2001

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APPENDIX



Changes to Abstract:

The following is a marked-up version of the amended Abstract.

<u>The invention</u> ~~To~~ <u>increases</u> ~~increase~~ the outgoing efficiency of light generated in an organic luminous layer of an organic electroluminescence element without decreasing the numerical aperture.

~~———~~A light-transmissive anode electrode layer ~~3~~, an organic luminous layer ~~4~~, and a light-reflective cathode layer ~~5~~ are <u>provided</u> ~~let exist~~ on the <u>entire</u> ~~whole~~ surface of one pixel region. On the anode layer ~~3~~, the organic luminous layer ~~4~~, and the cathode layer ~~5~~, slopes ~~62 - 64~~ are installed protruding from the anode layer ~~3~~ side to the cathode layer ~~5~~ side. By this, light ~~H~~ generated in the organic luminous layer, ~~4~~ and irradiated in parallel to a cumulate surface of a cumulate body ~~S~~, is reflected by the slope ~~63~~ on the boundary between the organic luminous layer ~~4~~ and the cathode layer ~~5~~ and <u>exits</u> ~~let go out~~ toward the anode layer ~~3~~ side.

Changes to Title:

The following is a marked-up version of the amended title:

~~An organic electroluminescence element and its manufacturing method~~

<u>ORGANIC ELECTRO-LUMINESCENCE ELEMENT</u>

<u>AND THE MANUFACTURING METHOD THEREOF</u>

Changes to Specification:

A Substitute Specification is attached in accordance with 37 C.F.R. 1.125(b)(2).

Changes to Claims:

The following are marked-up versions of the amended claims:

1. (Amended) An organic electroluminescence element, comprising:

~~equipped with~~ a cumulate body having a cathode layer, an anode layer, at least one ~~or more~~ organic thin film layer ~~layers~~ containing an organic luminous layer disposed ~~placed~~ between the cathode layer and the anode layer, ~~an organic electroluminescence element characterized by the fact that~~ the cathode layer and the anode layer defining ~~have~~ slopes.

2. (Amended) The organic electroluminescence element according to ~~described in~~ Claim 1, ~~characterized by the fact that~~ the slopes being ~~are~~ formed on ~~the~~ rim sides of a ~~the~~ pixel.

3. (Twice Amended) The organic electroluminescence element according to ~~described in~~ Claim 1, the slopes being disposed such that a ~~characterized by the fact that the~~ protruding height of the organic luminous layer ~~by the slopes~~ is larger than a ~~the~~ thickness of the organic luminous layer.

4. (Twice Amended) The organic electroluminescence element according to claim 1, the slopes being disposed such that a ~~described in Claim 1 characterized by the fact that the~~ protruding height of the organic luminous layer ~~by the slopes~~ is larger than a ~~the~~ total value of a ~~the~~ thickness of one of the anode layer and the cathode layer and a ~~the~~ thickness of the organic luminous layer.

5. (Twice Amended) The organic electroluminescence element according to claim 1, the slopes including multiple ~~described in Claim 1 characterized by the fact that a plural number of the~~ slopes that are ~~formed~~ evenly arranged ~~on the surface~~.

6. (Twice Amended) The organic electroluminescence element according to claim 1, ~~described in Claim 1 wherein~~ the slopes being ~~are~~ formed by providing ~~installing~~ a projection, made of an insulating ~~raw~~ material, on a substrate forming the cumulate body.

7. (Twice Amended) The organic electroluminescence element according to claim 1, ~~described in Claim 1 wherein~~ the slopes being defined by forming projections on at least one of the anode and the cathode, the projections ~~are formed by making the electrode layer formed on the substrate side forming the cumulate body in a shape having a projection~~ corresponding to the slopes.

8. (Amended) A method of manufacturing ~~the~~ an organic electroluminescence element ~~described in Claim 1~~, comprising:

~~a step of~~ forming an insulating film on a substrate ~~forming the cumulate body~~;

~~a step of~~ forming a projection having slopes made of an insulating ~~raw~~ material ~~on the part corresponding to the slopes~~ on the substrate by patterning the insulating film;

~~a step of~~ forming one of an anode layer and a cathode layer ~~the electrode layers~~ on ~~the substrate where~~ the projection ~~is formed~~;

~~a step of~~ forming an organic luminous layer ~~on~~ above the one of the anode layer and the cathode ~~electrode~~ layer; and

~~a step of~~ forming the other of the anode layer and the cathode ~~electrode~~ layer ~~on~~ above the organic luminous layer.

9. (Amended) The method of manufacturing the organic electroluminescence element according to ~~described in~~ Claim 8, the step of ~~characterized by~~ forming the projection ~~through~~includes:

~~a step of~~ forming a first insulating film that is made of a raw material on the substrate;

~~a step of~~ forming a second insulating film made of a ~~different~~ raw material that is different from the raw material of the first insulating film;~~,~~ and

~~a step of~~ patterning the second insulating film.

10. (Amended) ~~The~~ A method of manufacturing the organic electroluminescence element ~~described in Claim 1~~, ~~further~~ comprising:

~~a step of~~ forming one of ~~the~~ an anode layer and a cathode ~~electrode layers~~ layer over ~~on~~ a substrate ~~forming the cumulate body so that it is placed on the entire area and has a convex section on the part corresponding to the slopes~~in such a manner that one of the anode layer and the cathode layer has projections;

~~a step of~~ forming an organic luminous layer ~~on the electrode layer~~above the one of the anode layer and the cathode layer; and

~~a step of~~ forming the other of the anode layer and the cathode ~~electrode~~ layer ~~on~~ above the organic luminous layer.

11. (Amended) The method of manufacturing the organic electroluminescence element according to ~~described in~~ Claim 10, ~~wherein~~ one of the anode layer and the cathode ~~electrode layers~~ layer being~~is~~ a light-transmissive electrode layer~~, formed through a step of forming on the substrate a first thin film made of light-transmissive, conductive material by the sputtering method;~~

~~a step of forming on the first thin film a second thin film made of light-transmissive, conductive material by forming a liquid coating containing a light-transmissive material and then removing the solvent in this coating; and~~

~~a step of forming a convex section by patterning the second thin film and then baking it~~.